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Michael J. Seals

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FOLEY & LARDNER LLP
150 EAST GILMAN STREET
P.O. BOX 1497
MADISON, WI 53701-1497

EXAMINER

TAYLOR, BARRY W

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Continuation Sheet (PTO-303)

a) The Examiner reviewed Applicant's remarks and amendments to claims with new issues, which changes the scope of the claims requiring further search and/or consideration. For example, claim 36 previously recited "a processor configured to perform at least the following" and claims 37, 40 add new limitations.

b) Furthermore, Applicants generally argue that Arvelo discloses modifying the transmission power in the opposite manner (page 10).

It appears that Applicants invention starts out with high power and when the PER exceeds a threshold, the Tx power is reduced. Whereas, Arvelo starts out at a lower Tx power and when the PER exceeds threshold, the Tx power is increased. The Examiner notes that using different threshold values is not novel.

c) Applicants point to the abstract of Harris and argue that Harris does not teach comparing error rate to determine output power (page 10).

The examiner disagrees. Harris also teaches a method and apparatus to adjust output power for re- transmission of packets (paragraph 0065). Harris teaches first and second error rates are used to determine a transmit output power (paragraph 0066). Harris even teaches the use of a third error rate before determining a transmit output power (paragraph 0067). More importantly, Harris teaches comparing a first, second, or additionally third and fourth error rates (paragraph 0068) to determine how to adjust the transmit output power. In this way the system can maintain an overall error rate or abort rate by individually adjusting each leg of the link and allowing retransmissions to be utilized on legs that can best afford retransmissions and transmissions may be made at

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higher power levels on legs where the transmissions will least interfere with other communications (see last nine lines of paragraph 0068 and paragraphs 0071 and 0072).

d) Applicants argue that Cooper teaches power is increased in response to an error rate exceeding a target rate, and decreased in response to an error rate not exceeding the target rate (page 11).

The Examiner disagrees. Cooper also teaches continuously comparing bit error rates to a target bit error rate over a wireless communications network (paragraphs 0002, 0047) so that transmit power may be increased or decreased (i.e. **dithering**) to provide greater throughput (abstract). Cooper teaches error rates are continuously compared to a target rate so transmit power can be adjusted to match changes in channel conditions (paragraph 0008). Cooper teaches an algorithm is used to compare predetermined channel performance metrics which include error rates (paragraph 0025) in order to change transmit power in an **incremental and controlled manner** (paragraphs 0028, 0047). In other words, when the calculated error rate is less than the target error rate, meaning that fewer errors are occurring on the channel than the target number of errors, power can be decreased in order to allow the calculated error rate to increase to match the target error rate and if there are more errors occurring on the channel than the target number of errors, power can be increased in order to allow the calculated error rate to decrease to match the target error rate (paragraph 0047). **Cooper is very clear that error rates are used to determine whether to increase or decrease power (i.e. dither)** (paragraph 0054).

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It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the power control method and system as taught by Arvelo to compare error rates as taught by Harris or Cooper in order to provide a means for the transmitter to incrementally adjust power levels for transmission thereby minimizing interference as taught by Harris and to optimize throughput as taught by Cooper while maintaining error targets as taught by both Harris and Cooper.

/Barry W Taylor/

Primary Examiner, Art Unit 2617